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10/774,638	07/02/2002	Gregory Burdett	08894984US	7715

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GOWLING LAFLEUR HENDERSON, LLP
Suite 2600
160 Elgin Street
Ottawa, ON K1P 1C3
CANADA

EXAMINER	
HERRING, VIRGIL A	
ART UNIT	PAPER NUMBER
2132	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/774,638	BURDETT ET AL.	
	Examiner	Art Unit	
	VIRGIL HERRING	2132	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *08 June 2007*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-12* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-12* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

This action is in response to the amendment filed 8 June 2007. Claim 12 is new, and claims 1-12 are currently pending.

Response to Arguments

Applicant's arguments filed 8 June 2007 have been fully considered but they are not persuasive.

With regards to independent claims 1 and 7, Applicant first argued that Travaly is a non-analogous art to the claimed invention, citing the classification as evidence. The examiner respectfully disagrees and notes that, particularly in the computing arts, two systems may have the same structure, but may be used in different ways. Furthermore, the classification of a patent or application is based on the claims, not the disclosure as a whole. Thus, a single disclosure may support multiple claim sets (i.e. inventions) with different classifications. However, regardless of classification, a disclosure may anticipate a claim regardless of the invention as a whole, if there exists a portion of the disclosure which describes an identical structure operating in the same way as the claimed invention. In the case of Travaly, the use of user-wearable devices or the application of the system to a power plant is irrelevant, because the system as a whole is a computer network employing VPN and wireless technology, as specified by the claims.

Applicant then argued that Travaly does not teach or suggest an acceleration tunnel traversing a wireless network, wherein the term "acceleration" refers to wireless communication performance optimization, as specified by the new limitations to claims 1 and 7. Applicant argued that there is no reason for one skilled in the art to interpret the VPN Accelerator 54 as an accelerator for a wireless network, because there is no explanation in the specification of what specifically the device does. The examiner respectfully disagrees, noting that Applicant's specification indicates that wireless acceleration is described in the Background of the Invention, and as such, is admitted to be prior art technology. Ergo, it would be obvious to one skilled in the art to interpret the "acceleration" of a VPN Accelerator 54 connected to a Wireless Access Point 114 (via Ethernet Hub 120) as referring to acceleration of the wireless communication.

Applicant then argued that Travaly does not teach or suggest the encryption of an acceleration tunnel traversing a wireless network, because encryption is not inherent to VPNs. The examiner notes, however, that it would be obvious to one skilled in the art for a VPN tunnel, either wired or wireless, to be encrypted to further ensure the Privacy of the Virtual Private Network. Encryption to ensure privacy of communications dates back to at least the time of Julius Caesar, who used encryption to communicate sensitive information to his generals, so it is unlikely that one skilled in the art of network communications and VPNs would be unfamiliar with the concept.

Applicant then argued that Travaly does not teach or suggest a VPN switch and a plurality of enterprise content servers. Applicant also reiterates the argument that a power plant is non-analogous to the claimed invention to a plurality of enterprise content servers. Applicant further argued that the interpretation of Router with VPN Module 56 as corresponding to a VPN switch is improper. The examiner respectfully disagrees with the arguments regarding analogous art, as described above. Regarding the "enterprise content servers", Travaly discloses servers 52 and 152 (figures 1 and 5, respectively). In general, any server is a "content server", and the "enterprise content" in the case of Travaly is application data or web portal data (see ¶ 0024, page 3). Regarding the "VPN switch", the examiner notes that routers are also known as "layer 3 switches", and as such, the Router with VPN Module 56 would anticipate a VPN switch.

Applicant then argued that transmission of such data as usernames, passwords, and VPN addresses is not inherent to the operation of a VPN. The examiner respectfully disagrees, noting that authentication is a key feature in networking in general, and VPN in particular. Furthermore, network communications inherently include the address of both the sender and receiver in all communications.

Claim Objections

Claim 1 is objected to because of the following informalities: the limitation "communicating required data responding to said required data information from one of said plurality of enterprise content servers to said VPN switch" does not make sense as

written. It appears to the examiner that something is missing, perhaps a reference to a "request" for required data, or an indication of which of the two devices is sending the information. Clarification or appropriate correction is respectfully requested.

Claim Rejections - 35 USC § 103

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claims 1-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Travaly et al. (US Publication # 2002/0159441 A1).

With regards to claim 1, Travaly et al disclose a method of securely accelerating customer premises equipment based virtual private network transmissions over a carrier network comprising the steps of:

establishing an acceleration tunnel between a VPN acceleration client and a VPN acceleration server in response to a VPN acceleration client request for information, the tunnel traversing a wireless network; (Fig. 5, where the client is #116 or 118 and the VPN acceleration server is #54)

transmitting said VPN acceleration client's address and required data information to said VPN acceleration server over said acceleration tunnel; (inherent step required for all VPNs; required information such as username, password, and the address of the target VPN server is inherent)

establishing a VPN tunnel between said VPN acceleration server and a VPN switch, said VPN switch accessing a plurality or enterprise content servers, said plurality of enterprise content servers providing said required data information transmitted, (Fig. 5, where the switch is the #56 within communication network #64)

wherein said acceleration tunnel and said VPN acceleration server utilize the same network layer in a standard OSI model; (both are VPN tunnels, so they would inherently use the same network layer)

communicating required data responding to said required data information from one of said plurality of enterprise content servers to said VPN switch; (data is transmitted from server #152 to VPN Router #56, and from there through the wireless network to VPN Accelerator #54)

transmitting said required data from said VPN switch to said VPN acceleration server over said VPN tunnel; (inherent; VPN tunnels are intended to be used, rather than created and ignored)

accelerating said required data by said VPN acceleration server; transmitting said required data to said VPN acceleration client. (inherent; because a VPN exists between accelerator #54 and client #116, communications between the two use the VPN, rather than creating and ignoring it)

With regards to claim 7, Travaly et al disclose a VPN acceleration server for providing secure virtual private network service for wireless clients comprising:

a first module for terminating a virtual private network (VPN) tunnel to a VPN switch, said VPN switch accessing a plurality of enterprise content servers, said plurality of enterprise content servers providing required data information; (Fig. 5, #56 within network #64; server #52)

a second module for accelerating data for transmission over a wireless network; and (Fig. 5, #54)

a third module for terminating an acceleration tunnel to a wireless client whereby a secure virtual network service is provided between the VPN switch and the wireless client, for which acceleration of data on the wireless network is provided, (Fig. 5, #116 or 118)

wherein said encrypted acceleration tunnel and said virtual private network tunnel utilize the same network layer in a standard OSI model. (both are VPN tunnels, so they would inherently use the same network layer)

With regards to claims 1 and 7, Travaly et al do not expressly disclose the use of encryption in the tunnels, the decryption of the required data upon receipt at the client, or that the "acceleration" in question is wireless communication optimization. However, at the time of the invention, encryption and decryption to ensure privacy were well known, and it would have been obvious to one skilled in the art to encrypt communications sent over a network via a VPN, as discussed in the Response to

Arguments. Furthermore, it would be obvious to one skilled in the art that the VPN Accelerator 54 is accelerating wireless communications, which is known to mean wireless communication optimization, also as discussed in the Response to Arguments.

With regards to claims 2, 4-6, and 8-11, the claims specify various known methods of establishing VPN (public key infrastructure, IPSec, MPLS, and L2TP). At the time of the invention, it would have been obvious to one skilled in the art that any of these known VPN systems would be applicable in the establishment of any VPN.

Specific examples of PKI, IPSec, MPLS, and L2TP in regards to wireless VPN can be found in US Patents 6,970,459; 6,907,532; 6,976,177; 6,916,247; 6,945,870; and US Publications 2001/009025; 2001/0020275; 2001/0037384; 2002/0037384; 2002/0083344; 2003/0046362; 2003/0100369 through 0372; 2003/0088771; 2003/0053434; and 2003/0058827.

With regards to claim 3, Travaly et al disclose a method as claimed in claim 1 wherein the required data information includes at least one of a VPN switch address, user name, and password. (all three are inherent to establishing a VPN; the switch address is inherently required, because the VPN is meant to communicate with a specific server on the Internet; the user name and password are inherently required because VPNs are meant to be secure connections between a client and a server)

With regards to claim 12, Travaly et al do not expressly disclose the method as claimed in claim 1, wherein the wireless performance optimization is selected from the group consisting of compression, protocol optimization, caching, traffic management, and a combination thereof. However, as discussed above, one skilled in the art would have recognized that the VPN Accelerator 54 performs wireless communication optimization. Applicant's Background of the Invention admits that the types of optimization specified by claim 12 are admitted prior art techniques. As such, at the time of the invention, it would have been obvious to one skilled in the art that the acceleration of Travaly et al would include wireless communication optimization selected from the group consisting of compression, protocol optimization, caching, traffic management, and any combination thereof.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to VIRGIL HERRING whose telephone number is (571)272-8189. The examiner can normally be reached on Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gilberto Barron can be reached on (571) 272-3799. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Virgil Herring
Examiner
Art Unit 2132

/V. H./
Examiner, Art Unit 2132

/Gilberto Barron Jr/

Supervisory Patent Examiner, Art Unit 2132